



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,291	03/23/2004	Shinya Igarashi	056207.43640C5	1864

23911 7590 12/19/2006  
CROWELL & MORING LLP  
INTELLECTUAL PROPERTY GROUP  
P.O. BOX 14300  
WASHINGTON, DC 20044-4300

EXAMINER
----------

ALLEN, ANDRE J

ART UNIT	PAPER NUMBER
----------	--------------

2855

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/806,291

Applicant(s)

IGARASHI ET AL.

Examiner

Andre J. Allen

Art Unit

2855

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-16, 21-24 and 30-35 is/are allowed.
- 6) ☒ Claim(s) 17-20 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 29 and 36-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-20,25-28 is rejected under 35 U.S.C. 102(b) as being anticipated by Hyltin et al (US 4337822).

Regarding claims 17 and 25 Hyltin et al teaches a detecting element 146 for detecting a physical quantity (col. 11 lines 40-45); a concave (interpreted as concave) formed outside the housing (fig.1 a circuit 64 electrically connected to said detecting element; 146 a housing protecting (fig. 1) said circuit 64 in an inside thereof , a conductor 42 electrically connecting said circuit 64 and an outside of said housing 16, wherein said circuit 64 is adjusted 16 by an electrical signal from the outside of said housing through said conductor 42.

Regarding claims 20 and 28 Hyltin et al teaches a terminal 46a connected to said circuit 64 and to a power source 88 to supply power to said circuit 64 or to the ground to be grounded is provided, a connector 38d 38e opening to the outside of said housing is formed in said housing (fig. 1), said conductor 42 and said terminal 46a are exposed inside said connector 38d 38e.

Regarding claims 18 and 26 Hyltin et al teaches an adhesive or insulator coating the conductor inside the concave (fig.2).

Regarding claim 19,27 Hyltin et al teaches another material covering over said concave is provided (plastic fig. 1)

### ***Response to Arguments***

2. Applicant's arguments filed 9-26-06 have been fully considered but they are not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., external signal) are not recited in the rejected

claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The Examiner agrees with the applicants arguments that Hyltin et al teaches "return conductors", thermostat slide switches that allow manual adjusting of an internal signal. However, referring now to the applicants claims "wherein said circuit is adjusted by an electrical signal from outside the housing through the conductor" is anticipated by the Hyltin et al since the slidable switches would allow a user to 'adjust an electrical signal from the outside of the housing through the conductor'. Focusing on the functionality of the slidable switches of the Hyltin reference, the slidable switches 176 178 are adjustable by an electrical signal associated with the said conductors and are adjusted from the outside of the housing (figs. 10 and 11). Therefore the applicants argument regarding this feature is not persuasive.

In response to the applicants arguments that the cited prior art (Hyltin et al) does not disclose a "concave formed outside of the housing is not found to be persuasive. That is, as shown in fig 1 of the Hyltin et al patent, there is an area on the outside of the housing notched/carved area that is in contact with the conductors whether the conductors be the power conductor 42 or the return conductors 176 178 as described by the applicant (page 12 lines 3-8). The "carved portion" (It is defined in the

Thesaurus of Thesaurus.com that a carved portion is also considered a concave) is therefore, being interpreted as being concave. Furthermore, it does not appear that the shape of the carved portion would perform differently than the concave shape as claimed or solve any critical problem since, a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

***Allowable Subject Matter***

3. Claims 13-16, 21-24 and 30-35 are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding claims 13-16 and 21-24 the cited prior art does not disclose nor suggest the conductor electrically connecting said circuit and exposed outside of said housing. Regarding claims 30-35 the cited prior art does not disclose nor suggest wherein the output characteristic, the controlled quantity or detected quantity of said sensing element is adjustable by applying an electric signal to said adjusting terminal, wherein adjusting terminal is arranged inside a connector housing containing therein connector terminals for an output terminal for transmitting an output signal of an said electronic circuit to external

equipment, a power source terminal for connecting to an power source or a ground terminal.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance.

4. Claims 29 and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the cited prior art does not disclose nor suggest said connector has a bottom with a hole or holes at one side and an opening formed at an opposite side to said bottom and opening to the atmosphere, and at least a part of said conductor is disposed in said hole and exposed to the atmosphere, said thermal flow instrument being applied to a internal combustion engine and wherein after said circuit is adjusted, said adhesive or insulating material is coated..

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 571-272-2174. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "A. Allen", with a stylized flourish at the end.

André Allen  
Patent Examiner  
Art Unit 2855